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STRENGTHENING THE EFFECTIVENESS AND IMPROVING THE EFFICIENCY OF THE SAFEGUARDS SYSTEM

INTRODUCTION

1. In resolution GC(41)/RES/16 on "Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System and Application of the Model Protocol", the General Conference, inter alia:

(a) "request(ed) the Secretariat to pursue the implementation of Part 1 measures of Programme 93+2 without delay as far as available resources permit;"

(b) "affirm(ed) that strengthening the effectiveness and improving the efficiency of the safeguards system with a view to detecting undeclared nuclear activities must be implemented rapidly and universally by all concerned States and other parties in compliance with their respective international commitments;"

(c) "support(ed) the Board's decision to request the Director General to use the Model Protocol as the standard for Additional Protocols that are to be concluded by States and other parties to comprehensive safeguards agreements with the Agency, which should contain all of the measures in the Model Protocol;"

(d) "support(ed) the Board's decision to request the Director General to negotiate Additional Protocols or other legally-binding agreements with Nuclear Weapon States incorporating those measures provided for in the Model Protocol that each Nuclear Weapon State has identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol, when implemented with regard to that State, and as consistent with that State's obligations under Article I of the NPT;" and

(e) "support(ed) the Board's decision to request the Director General to negotiate Additional Protocols with other States that are prepared to accept measures provided for in the Model Protocol in pursuance of safeguards effectiveness and efficiency objectives."

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The General Conference also:

(f) "request(ed) all concerned States and other parties to safeguards agreements to sign Additional Protocols promptly so that, once signed they can be ratified or accepted without delay;" and

(g) "request(ed) the Director General to report on the implementation of this resolution to the General Conference at its forty-second regular session."

This report has been prepared pursuant to that resolution.

2. The Secretariat has continued since the 1997 General Conference to work towards a more effective and efficient safeguards system (the Strengthened Safeguards System). The work falls into two broad areas: (a) implementation of strengthening measures within the Agency's legal authority under existing comprehensive safeguards agreements (formerly known as 93+2 Part 1 measures); and (b) progress towards implementation of the Additional Protocol.

A. IMPLEMENTATION OF MEASURES UNDER EXISTING AUTHORITY

Information (Evaluation, Handling and Confidentiality)

3. As a result of the specific safeguards strengthening measures of recent years, the Agency has now more information on States nuclear programmes at its disposal than hitherto: information submitted by States, information generated during the Secretariat's verification activities and information collected from other, external or internal, sources. Regular evaluations of all this information commenced in 1997. The Information Review Committee (IRC), consisting of senior Secretariat officials, reviews the evaluations made and establishes agreed recommendations for follow-up activities. Through this process of information evaluation and review, the Secretariat is better able to judge the correctness and completeness of member States' declarations. These evaluations also provide a basis for assessing the information subsequently submitted by States according to the requirements of the Additional Protocol.

4. The Secretariat's regime for handling and maintaining confidential information was initially put to the Board of Governors for consideration in March 1997 (GOV/2897). In endorsing the regime, the Board emphasized the importance of confidentiality, and decided to review the regime periodically. The Board requested the Secretariat to consider all the suggestions made by it and, as appropriate, incorporate them in a supplement to GOV/2897 for Board consideration. The supplement, GOV/2959, was circulated to the Board for its December 1997 meeting, at which the Board approved the confidentiality regime, as supplemented. As a consequence, all Agency staff and non-staff members are now requested to sign a confidentiality undertaking. Additionally, the Department of Safeguards is reviewing procedures for the protection of confidential information.

Physical Access (Access Rights)

5. Lifting restrictions on inspector designations and granting inspectors long term multiple-entry visas would enable more effective safeguards implementation and the more efficient use of the Agency's inspection resources. Simplified designation procedures have so far been accepted by 30 States. This has helped to reduce the average time for States' acceptance of designations from ten months in December 1993 to three months in December 1997. The Secretariat has written to States requesting them to provide Agency inspectors with, as a minimum, one-year multiple-entry and/or transit visas. By the end of 1997, 25 States had provided designated inspectors with multiple-entry visas, 23 of them granting the visas for a period of one year or more. This represents a significant improvement in the provision of long term multiple-entry visas.

Inspector Training

6. The strengthened safeguards system requires new skills and abilities on the part of the inspector. The training curriculum for safeguards inspectors is therefore being expanded to address these requirements. New courses are being conducted for inspectors on enhanced observational skills, proliferation indicators and information evaluation.

New Technology (Environmental Sampling, Remote Monitoring)

7. Among the new safeguards technical measures, priority is being given to the use of environmental sampling, and arrangements have been made to introduce it as a routine measure. By mid-1998 environmental samples had been collected at eleven enrichment facilities in seven States and at 59 hot cell complexes in 34 States and Taiwan, China. Specialized laboratories in three Member States and within Euratom have been certified to perform analyses of environmental samples.

8. The introduction of safeguards approaches using remote transmission of safeguards data can significantly reduce inspection effort in the field, thereby potentially reducing the costs of safeguards implementation while improving safeguards effectiveness. Field trials have shown that remote monitoring systems can be effective and cost competitive. Remote monitoring has now been approved for use by Safeguards Operations Divisions and is being implemented in a number of facilities. Further field trials are being carried out to create a solid basis for the wider use of remote monitoring at various types of facilities. The transfer of the data via telephone or special satellite links has been demonstrated, and the necessary infrastructure is being set up.

B. PROGRESS IN IMPLEMENTATION OF THE ADDITIONAL PROTOCOL

Conclusion of Additional Protocols

9. As the General Conference will be aware from the Director General's report (GC(41)/22) on this issue to last year's General Conference, in approving the Model Additional Protocol to safeguards agreements at its special meeting on 15 May, 1997, the Board of Governors requested the Director General at that time to proceed with the conclusion of Additional Protocols with States as set forth in the Foreword to the Model Protocol.

10. In response, the Secretariat developed a plan to bring the Additional Protocol promptly to the attention of States. The first step was the dispatch of letters from the then Director General, immediately following the May 1997 Board of Governors meeting, to all States which had concluded safeguards agreements, or which had an obligation to conclude safeguards agreements with the Agency, to invite them to conclude Additional Protocols. The Secretariat followed up this initial action through informal contacts with States' representatives at every opportunity taking advantage, in particular, of major international meetings, such as the United Nations General Assembly and the Preparatory Conference for the 2000 NPT Review Conference. A further reminder letter was sent in July 1998 to States which had not yet concluded Protocols.

11. Where possible, and because Additional Protocols concluded with States with comprehensive safeguards agreements are to contain all the measures in the Model Protocol, work has gone forward without any formal consultations. As noted in GOV/INF/829, there are arrangements in place, however, within the Secretariat where consultations are required. These arrangements follow closely those in place for the negotiation of safeguards agreements.

12. When Additional Protocol consultations are requested they are normally held in Vienna. For the reasons given above, consultations with States and other parties to comprehensive safeguards agreements are relatively straightforward because their Protocols are to contain all of the measures of the Model. Consultations with parties to other safeguards agreements can be more complex, being based on those aspects of the Model Protocol which States party to safeguards agreements have identified as accepted for implementation.

13. The consultations held to date have gone forward in a cooperative and constructive spirit. States have demonstrated that they attach considerable importance to the Additional Protocol in terms of its potential contribution to international nuclear non-proliferation efforts, high on the international agenda.

14. As of 11 September 1998, Additional Protocols for 32 States have been approved by the Board of Governors or submitted for its approval. They cover 29 non-nuclear-weapon States with comprehensive safeguards agreements in force or awaiting ratification[1], and 3 nuclear-weapon States[2]. All of these Additional Protocols have been signed or are expected to be signed in the near future. One Protocol has been ratified and is now in force[3]. Another Protocol is currently being applied provisionally pending ratification[4]. Two Protocols currently awaiting approval by the Board will enter force upon signature[5], and one will be applied upon signature pending ratification[6].

15. In addition to the above, Taiwan, China has agreed to the application of the measures contained in the Additional Protocol.

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[1] Armenia, Australia, Austria, Bulgaria, Belgium, Canada, Croatia, Denmark, Finland, Georgia, Germany, Ghana, Greece, Holy See, Ireland, Italy, Jordan, Lithuania, Luxembourg, Netherlands, New Zealand, Philippines, Poland, Portugal, Slovakia, Spain, Sweden, Uzbekistan, Uruguay

[2] France, United Kingdom, United States of America

[3] Australia

[4] Armenia

[5] Holy See, New Zealand

[6] Uzbekistan

16. The Secretariat is continuing actively to encourage States to conclude Additional Protocols as a contribution to global nuclear non-proliferation objectives. The primary focus is States which have indicated their readiness to conclude Additional Protocols quickly. Thereafter, although the Secretariat is taking all opportunities that arise with all States to bring the Additional Protocol to their attention, it would seem to be proper to look in particular towards States with significant nuclear programmes.

17. Further consultations have already taken place or are planned in September and October 1998 with Chile, China, Cuba, Japan, the Republic of Korea, and Russia. The Secretariat expects Additional Protocols for these States, and others, to be put imminently to the Board for approval.

Preparations for Implementation of the Additional Protocol

18. The preparations by the IAEA Secretariat to develop a new infrastructure in order to implement the Additional Protocol include :

- the development of guidelines for submissions pursuant to Articles 2 and 3 of the Additional Protocol;

- the development of model language for Subsidiary Arrangements;

- the development of internal guidelines for complementary access;

- the development of procedures and systems for information treatment; and

- the development of operational procedures for protocol implementation on a State by State basis.

Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements

19. Specific guidelines have been developed by the Secretariat defining the additional, largely qualitative information to be provided by States to the Agency under Articles 2 and 3 of the Additional Protocol. The guidelines will help States to formulate internal procedures and regulations to ensure that the necessary information can be made available to the Secretariat. The document entitled "Guidelines and Format for Preparations and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements (August 1997)" was sent out to States in 1997.

20. Most of the information sought under Articles 2 and 3 of the Additional Protocol is new to IAEA safeguards. Accordingly, the "Guidelines" document will be subject to revision on the basis of the experiences of the Agency and of States. The Secretariat has asked for States' suggestions or comments on the initial version. During its November 1997 meeting, the Standing Advisory Group on Safeguards Implementation (SAGSI) concluded that the document was appropriately specific and explanatory to be of significant assistance to States.

Development of Model Language for Subsidiary Arrangements and Communications to States

21. Under the Model Additional Protocol, subsidiary arrangements may be requested by the State or the Agency to incorporate additional details about implementation. The Secretariat has developed model language which can be drawn upon, as required, to address such matters as communication channels between the State and the Agency, general modalities relating to complementary access, modalities relating to locations where the State anticipates a continuing need for managed access and the implementation of measures relating to communications systems. Model language for reports to States under Article 10 of the Additional Protocol has also been developed.

Development Of Internal Guidelines For Complementary Access

22. Guidelines for complementary access are being developed for the internal use of the Secretariat to ensure that complementary access is carried out in an efficient, technically effective and non-discriminatory manner. The guidelines will include, for each type of location specified under Article 5 of the Protocol, the scope of the access, the nature of the State's or the Agency's obligations, the purpose, the minimum notice period, procedural aspects for requesting access and operational aspects regarding the activities to be carried out. For sites containing nuclear facilities the guidelines will include a basis for the selection of places for access within the site; for locations without nuclear material access will be on a case-by-case basis and, under most circumstances, preceded by consultations with the State. A document summarizing these guidelines will be prepared for distribution to States.

Managed Access

23. The use of managed access is an important provision of the Additional Protocol for which the Agency has limited experience. The Secretariat has established contact with the Organization for the Prohibition of Chemical Weapons (OPCW) and a bilateral arms control organization to gain understanding of how they dealt with the concept of managed access during the negotiations of the pertinent legal instruments and to obtain any relevant documentation.

Treatment Of Information Under The Additional Protocol : Protocol Data Information System

24. Under the Additional Protocol the Secretariat will receive much more information than hitherto about States' nuclear programmes and there is a need to deal with the receipt, quality control, storage and use of that information for evaluation purposes. A computerized Protocol Data Information System is being developed to meet this need. Specific features are being included to ensure the confidentiality of information. The development of the system started in early 1998; a first version has been completed in time to begin processing declarations from Member States.

Procedures For Additional Protocol Implementation

25. Progress has been made in preparing the procedures necessary for the initial implementation of the Additional Protocol in the relevant States. Such preparations include defining procedures for evaluating Article 2 declarations, for planning and carrying out complementary access under the Additional Protocol, and for the issuance of reports by the Agency under Article 10. Estimates of the resources involved are also being formulated.

INTEGRATED SAFEGUARDS

26. The long term aim of the Agency is to mesh fully in a coherent whole the traditional, nuclear material accountancy-based, safeguards system with the new strengthening measures. Only then will the Agency's safeguards objectives be met with the optimum effectiveness and efficiency. For example, new measures to improve the assurance of the absence of undeclared nuclear material and activities in a State, together with new technology, may lead to the relaxation of certain traditional measures on less sensitive nuclear material and thus a reduction in the costs associated with such activities. High priority is therefore being given to the work on integration. The major elements of integrated safeguards are being established in consultation with SAGSI. Appropriate co-ordination is also being maintained with related activities in the Secretariat, and in Member States in the framework of the Agency's Safeguards Research and Development and Implementation Support Programme.

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27. The Secretariat will continue to keep the General Conference informed of progress in all of these areas.